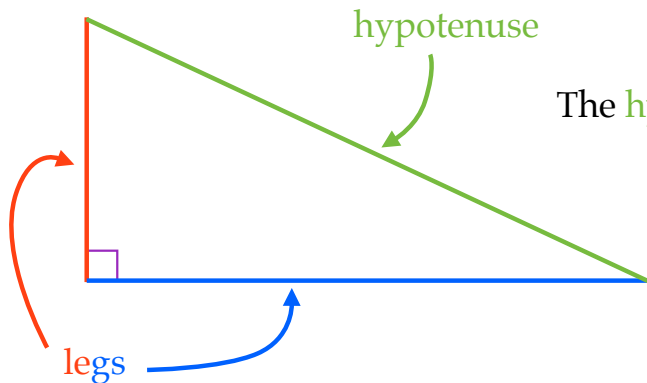


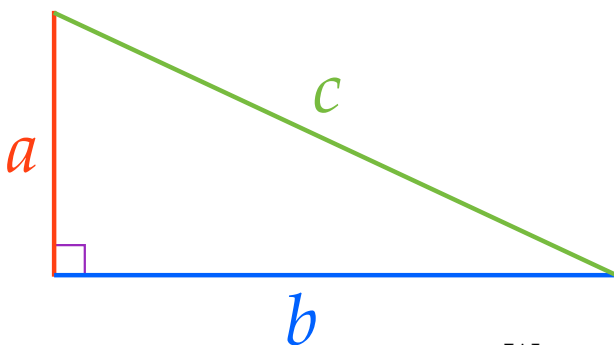
The sides of a right triangle have specific names.



The **hypotenuse** is the side opposite the **right angle**.
It is always the longest.

The other two sides are the **legs**.

In a **right triangle**, the **sum of the squares of the legs**
is equal to the **square of the hypotenuse**.

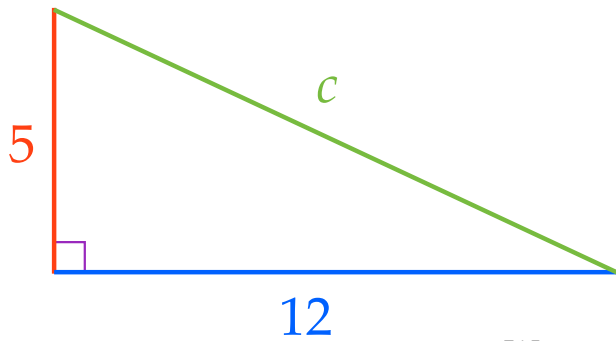


$$(\text{leg})^2 + (\text{leg})^2 = (\text{hypotenuse})^2$$

$$a^2 + b^2 = c^2$$

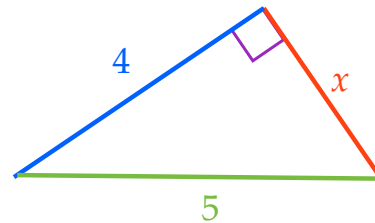
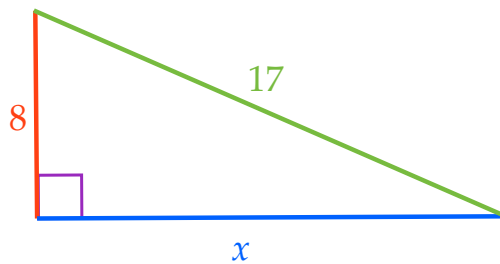
We can use this formula to solve for the length of a
missing side of a **right triangle**.

In a right triangle, the sum of the squares of the legs is equal to the square of the hypotenuse.

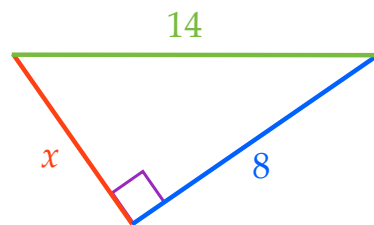
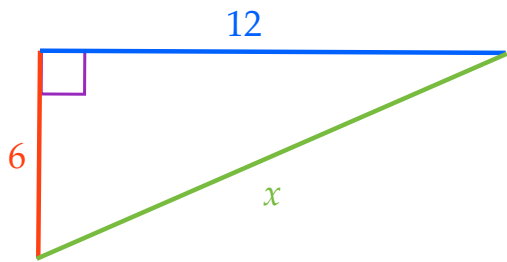


We can use this formula to solve for the length of a missing side of a right triangle.

Solve for the missing side of the following right triangles.



Solve for the missing side of the following right triangles.



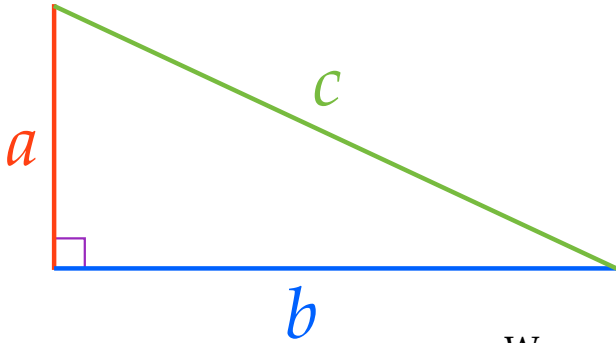
Do the following side lengths create a right triangle?

8, 5, and 10

15, 12, and 9

10, 24, and 26

In a right triangle, the sum of the squares of the legs is equal to the square of the hypotenuse.



$$(\text{leg})^2 + (\text{leg})^2 = (\text{hypotenuse})^2$$

$$a^2 + b^2 = c^2$$

We can use this formula to solve for the length of a missing side of a right triangle.